tulates, relatively magnified. Scale 1-48th to 1-6000th of an inch.

Fig. 9. The same, pore surrounded by ovoid cells, seen through the cuticula: *a*, ovoid cells; *b*, epithelial cells lining the pore. Scale 1-24th to 1-6000th of an inch.

Fig. 10. *Chondrilla australiensis*, n. sp., small specimen attached to a piece of oyster-shell: *a*, *Chondrilla*; *b*, oyster-shell; *c*, vent: magnified 2 diameters.

Fig. 11. The same, vertical section, nat. size.

Fig. 12. The same, vertical section (No. 11) magnified 8 diameters: *a*, cortical translucent rind; *b*, body-substance, opaque; *c*, oyster-shell; *d*, pore-tubes passing down vertically through rind; *e*, pore-tubes, enlarged, branching and apparently opening direct into excretory canal-system; *f*, excretory canal-system, segmented in the section; *g*, vent, or single termination of the same; *h*, sphæro-stellate and radio-stellate spicules imbedded in the cortex. The spicules, though really existing throughout the mass, are generally not inserted, for the sake of perspicuity, any more than the ovoid cells and opaque structure of the body-mass.

Fig. 13. The same, portion of the surface, showing pore-openings, vertical view: *a*, pore; *b*, surrounding granules. Scale 1-48th to 1-6000th of an inch.

Fig. 14. The same, portion of the body-substance, showing:—*a*, trama, consisting of fine fibrillæ or filaments and minute granuliferous cellulæ; *b*, ovoid cells lined with cellulæ, situated in ovoid cavities of the trama; *c*, sphæro-stellate spicules. All relatively magnified; scale 1-48th to 1-6000th of an inch. (Compare with fig. 8, on the same scale, to show that the cells of *Corticium* are only half the size of those of *Chondrilla*.)

Fig. 15. *Corticium abyssi*, diagram of fragment of excretory canal-system, to show characteristic epithelial-cell lining: *a*, vent; *b*, "fragment." (In *Chondrilla australiensis* this cell lining is not present, probably from defective preservation.)

Fig. 16. *Chondrilla australiensis*, spicules of: *a*, sphæro-stellate; *b*, radio-stellate. Scale 1-12th to 1-6000th of an inch.

Fig. 17. *Rhabdolithes Schmidtii*, Cart. Scale 1-12th to 1-6000th of an inch. (See Schmidt's figures and description, 'Annals,' 1872, vol. x. p. 359, pl. xvii.)

Fig. 18. *Sphærolithes abyssi*, n. sp., Cart., average largest size. Same scale. (The double line is a deception here; it should merely signify the outer boundary of the layer of cellules, in fact the capsule which is perfectly spherical.)

III.—*A Catalogue of the Neuropterous Insects of New Zealand; with Notes, and Descriptions of new Forms.* By Robert M'Lachlan, F.L.S.

It has been represented to me that the entomologists of New Zealand are greatly in need of classified lists of the insects of that colony, and that any contribution in this way would be welcome. Acting upon this suggestion, I have drawn up a catalogue of the New-Zealand Neuroptera (in the Linnean